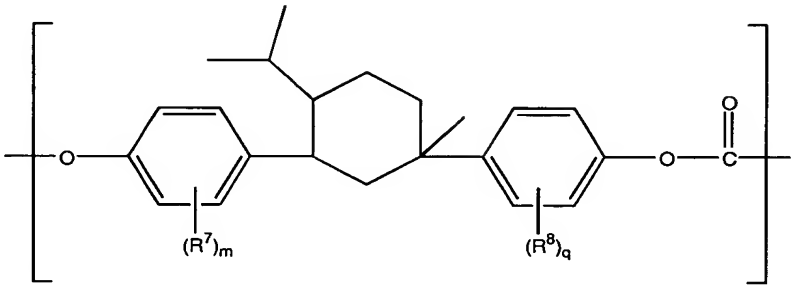
WHAT IS CLAIMED IS:

POLYMER:

[c01] 1. A polymeric substrate comprising formula (I):



(I)

where the three optically active sites of (I) can be R isomers, S isomers, or combinations thereof;

R^7 and R^8 are independently selected from the group consisting of C_1-C_6 alkyl and hydrogen;

m is an integer in a range between about 1 and about 4;

q is an integer in a range between about 1 and about 4; and

wherein the polymeric substrate is used in an optical display device or light emitting device.

[c02] .The polymeric substrate in accordance with claim 1, wherein R^7 and R^8 are hydrogen, m is 4 and q is 4.

[c03] .The polymeric substrate in accordance with claim 1, having a glass transition temperature greater than about 235°C.

[c04] The polymeric substrate in accordance with claim 1, having a haze less than about 4%.

[c05] The polymeric substrate in accordance with claim 1, wherein the polymeric substrate has a uniform thickness that varies less than about 3%.

[c06] The polymeric substrate in accordance with claim 1, wherein the optical display device is a liquid crystal display.

[c07] .The polymeric substrate in accordance with claim 1, wherein the light emitting device is an organic electroluminescent device.

[c08] The polymeric substrate in accordance with claim 1, wherein the polymeric substrate comprises at least one barrier layer.

[c09] The polymeric substrate in accordance with claim 8, wherein the barrier layer comprises an inorganic material, organic material, or combinations thereof.

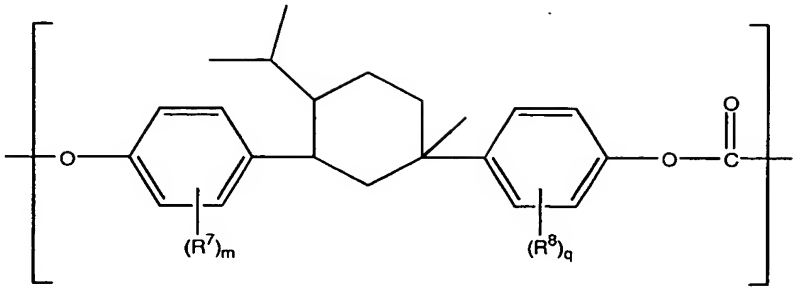
[c010] The polymeric substrate in accordance with claim 1, wherein the polymeric substrate comprises at least one substantially transparent conductive layer.

[c011] The polymeric substrate in accordance with claim 10, wherein said substantially transparent conductive layer comprises an oxide of at least one metal selected from the group consisting of tin, cadmium, indium, zinc, magnesium, gallium, and combinations thereof.

[c012] .The polymeric substrate in accordance with claim 11, wherein said substantially transparent conductive layer further comprises at least one dopant selected from the group consisting of gallium, aluminum, germanium, and tin.

[c013] The polymeric substrate in accordance with claim 12, wherein said oxide is indium tin oxide.

[c014] A polymeric substrate comprising formula (I):



(I)

where the three optically active sites of (I) can be R isomers, S isomers, or combinations thereof;

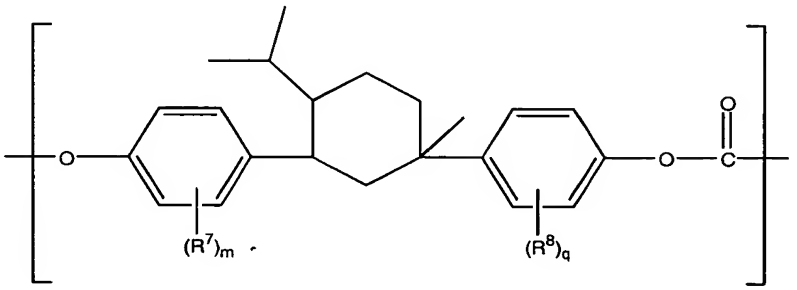
R^7 and R^8 are hydrogen;

m is 4; and

q is 4;

wherein the polymeric substrate is used in an optical display device, wherein the polymeric substrate further comprises at least one barrier layer and at least one substantially transparent conductive layer.

[c015] A method for using a polymeric substrate comprising disposing said polymeric substrate in an optical display device or a light emitting device, wherein said polymeric substrate comprises formula (I):



(I)

where the three optically active sites of (I) can be R isomers, S isomers, or combinations thereof;

R^7 and R^8 are independently selected from the group consisting of C_1-C_6 alkyl and hydrogen;

m is an integer in a range between about 1 and about 4;

q is an integer in a range between about 1 and about 4.

[c016] The method in accordance with claim 15, wherein R^7 and R^8 are hydrogen, m is 4 and q is 4.

[c017] The method in accordance with claim 15, wherein the polymeric substrate has a glass transition temperature greater than about 235°C.

[c018] The method in accordance with claim 15, wherein the polymeric substrate has a haze less than about 4%.

[c019] The method in accordance with claim 15, wherein the polymeric substrate has a uniform thickness that varies less than about 3%.

[c20] The method in accordance with claim 15, wherein the optical display device is a liquid crystal display device.

[c021] The method in accordance with claim 15, wherein the light emitting device is an organic electroluminescent device.

[c022] The method in accordance with claim 15, wherein the polymeric substrate further comprises at least one barrier layer.

[c023] The method in accordance with claim 22, wherein the barrier layer comprises an inorganic material, organic material, or combinations thereof.

[c024] The method in accordance with claim 15, wherein the polymeric substrate further comprises at least one substantially transparent conductive layer.

[c025] The method in accordance with claim 24, wherein said substantially transparent conductive layer comprises an oxide of at least one metal selected from

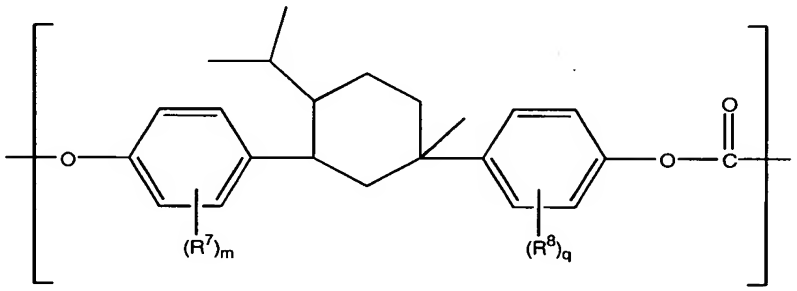
the group consisting of tin, cadmium, indium, zinc, magnesium, gallium, and combinations thereof.

[c026] The method in accordance with claim 25, wherein said substantially transparent conductive layer further comprises at least one dopant selected from the group consisting of gallium, aluminum, germanium, and tin.

[c027 The method in accordance with claim 26, wherein said oxide is indium tin oxide.

[c028] A liquid crystal display comprising:

a) two polymeric substrates, said two polymeric substrates being substantially parallel to each other, wherein each polymeric substrate comprises formula (I):



(I)

where the three optically active sites of (I) can be R isomers, S isomers, or combinations thereof;

R^7 and R^8 are independently selected from the group consisting of C_1-C_6 alkyl and hydrogen;

m is an integer in a range between about 1 and about 4;

q is an integer in a range between about 1 and about 4;

b) a transparent conductive layer disposed on a surface of each of said polymeric substrate; and

c) a liquid crystal material, said liquid crystal material being disposed between said two polymeric substrates, such that said liquid crystal material contacts said transparent conductive layer on each of said two substrates.

[c029] . The liquid crystal display in accordance with claim 28, wherein R^7 and R^8 are hydrogen, m is 4 and q is 4.

[c030] The liquid crystal display in accordance with claim 28, wherein the polymeric substrate has a glass transition temperature greater than about 235°C.

[c031] The liquid crystal display in accordance with claim 28, wherein the polymeric substrate has a haze less than about 4%.

[c032] The liquid crystal display in accordance with claim 28, wherein said liquid crystal material is a liquid crystal material selected from the group consisting of nematic liquid crystals, thermochromic liquid crystals, liotropic liquid crystals, ferroelectric liquid crystals, twisted nematic liquid crystals, super twisted nematic liquid crystals, and polymer-dispersed liquid crystals.

[c033] The liquid crystal display in accordance with claim 28, wherein the polymeric substrate has a uniform thickness that varies less than about 3%.

[c034] The liquid crystal display in accordance with claim 28, wherein said transparent conductive layer comprises an oxide of at least one metal selected from the group consisting of tin, cadmium, indium, zinc, magnesium, gallium, and combinations thereof.

[c035] The liquid crystal display in accordance with claim 34, wherein said transparent conductive layer further comprises at least one dopant selected from the group consisting of gallium, aluminum, germanium, and tin.

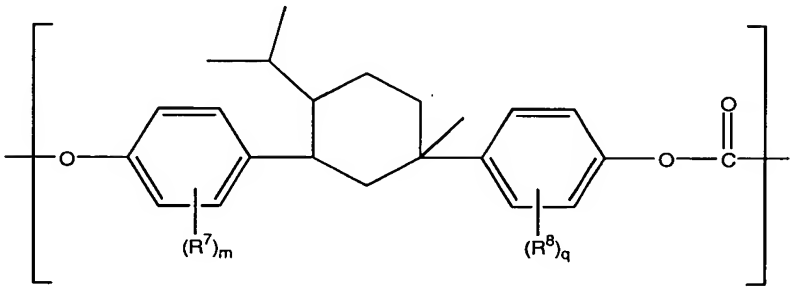
[c036] The liquid crystal display in accordance with claim 35, wherein said oxide is indium tin oxide.

[c037] The liquid crystal display in accordance with claim 28, wherein at least one barrier layer is disposed on at least one surface of the polymeric substrate.

[c038] The liquid crystal display in accordance with claim 37, wherein the at least one barrier layer comprises an inorganic material, organic material, or combinations thereof.

[c039] An organic electroluminescent device comprising

(a) a polymeric substrate wherein said polymeric substrate comprises formula (I):



(I)

where the three optically active sites of (I) can be R isomers, S isomers, or combinations thereof;

R^7 and R^8 are independently selected from the group consisting of C_1-C_6 alkyl and hydrogen;

m is an integer in a range between about 1 and about 4; and

q is an integer in a range between about 1 and about 4

(b) an organic electroluminescent layer disposed on the polymeric substrate, wherein the organic electroluminescent layer comprises an organic electroluminescent material disposed between two electrodes.

[c040] The organic electroluminescent device in accordance with claim 39, wherein the R^7 and R^8 are hydrogen, m is 4, and q is 4.

[c041] The organic electroluminescent device in accordance with claim 39, wherein the polymeric substrate has a glass transition temperature greater than about 235°C.

[c042] The organic electroluminescent device in accordance with claim 39, wherein the polymeric substrate has a haze less than about 4%.

[c043] The organic electroluminescent device in accordance with claim 39, wherein the polymeric substrate has a uniform thickness that varies less than about 3%.

[c044] The organic electroluminescent device in accordance with claim 39, wherein at least one barrier layer is disposed on at least one surface of the polymeric substrate.

[c045] The organic electroluminescent device in accordance with claim 44, wherein the at least one barrier layer comprises an inorganic material, organic material, or combinations thereof.

[c046] The organic electroluminescent device in accordance with claim 39, wherein at least one transparent conductive layer is disposed between the organic electroluminescent layer and the polymeric substrate layer.

[c047] .The organic electroluminescent device in accordance with claim 46, wherein said transparent conductive layer comprises an oxide of at least one metal selected from the group consisting of tin, cadmium, indium, zinc, magnesium, gallium, and combinations thereof.

[c048] The organic electroluminescent device in accordance with claim 47, wherein said transparent conductive layer further comprises at least one dopant selected from the group consisting of gallium, aluminum, germanium, and tin.

[c049] The organic electroluminescent device in accordance with claim 48, wherein said oxide is indium tin oxide.

[c050] The organic electroluminescent device in accordance with claim 39, wherein said organic electroluminescent material is selected from the group consisting of poly(n-vinylcarbazole), poly(alkylfluorene), poly(paraphenylene), polysilanes, derivatives thereof, mixtures thereof, and copolymers thereof.

[c051] The organic electroluminescent device in accordance with claim 39, wherein said organic electroluminescent material is selected from the group consisting of 1,2,3-tris{n-(4-diphenylaminophenyl) phenylamino} benzene, phenylanthracene, tetraarylethene, coumarin, rubrene, tetraphenylbutadiene, anthracene, perylene, coronene, aluminum-(picolymethylketone)-bis{2,6-di(t-butyl)phenoxide, scandium-(4-methoxy-picolymethylketone)-bis(acetylacetonate), aluminum-acetylacetonate, gallium-acetylacetonate, and indium-acetylacetonate.

[c052] The organic electroluminescent device in accordance with claim 39, wherein one of said two electrodes is an anode which is disposed on said substrate, and said anode comprises a material selected from the group consisting of indium tin oxide ("ITO"), tin oxide, indium oxide, zinc oxide, indium zinc oxide, cadmium tin oxide, mixtures thereof, and these oxides doped with aluminum or fluorine.

[c053] The organic electroluminescent device in accordance with claim 39, wherein a second of said two electrodes is a cathode and comprises a material selected from the group consisting of K, Li, Na, Mg, La, Ce, Ca, Sr, Ba, Al, Ag, In, Sn, Zn, Zr, Sm, Eu, alloys thereof, and mixtures thereof.